

State of Utah

2002 Economic and Demographic Projections



Governor's Office of Planning and Budget
Demographic and Economic Analysis
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State of Utah 2002 Economic and Demographic Projections

Baseline Highlights

State of Utah
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I. Introduction

This document is intended to highlight the major conclusions published in the detailed report that was released in January 2002 entitled, *State of Utah 2002 Economic and Demographic Projections, Summary Data Tables*. The Governor's Office of Planning and Budget (GOPB) publishes these long-term projections biennially. The primary purpose of the projections is to improve decision making and planning coordination in state government by providing a uniform set of population and employment projections. The long-term projections extend through the year 2030, and have been generated by the Utah Process Economic and Demographic model (UPED). The UPED model is an economic base, cohort-survival model that has been used by the State of Utah for many years to project and understand future growth. In addition to the UPED model and the staff efforts of GOPB, these projections incorporate the extensive contributions of representatives from the seven Associations of Government (AOG), along with other state and local representatives in Utah. Therefore these projections represent a consensus projection of the future based on both a statewide and local perspective. The primary goal of this round of updates was to incorporate the recently released data from the Census 2000. However, analysts used the opportunity of revising the projections to include the latest economic indicators as a part of the update process.

This overview of the *State of Utah 2002 Economic and Demographic Projections, Summary Data Tables* presents many of the economic and demographic trends anticipated to impact Utah over the next 30 years, places these findings in a historical context, and makes comparisons with national data and projections. In general, the demographic attributes that have characterized Utah in the past are the relative youthfulness and rapid growth of its population. In the future, the state's economy will reinforce the latter of these two by attracting a substantial number of in-migrants, and with the exception of a couple of years where out-migration is projected due to slowdowns in specific sectors, such as construction, in-migration should occur on a steady basis for the next several decades. These projections indicate that the distinctive demographic features (i.e. the youthful and rapidly growing population) will continue, as will the relative strength of the economy. Although there will be some convergence with national demographic and economic trends, Utah's population and employment growth rates are projected to continue to out-pace those of the nation for the next three decades.

While the larger projections report presents detailed demographic and employment information to a county level, this review document concentrates on the most basic conclusions as presented at the state level. Following this introductory section, the next section presents the demographic projections for the state. These include analysis of the components of population growth (i.e. natural increase and net migration) and changes in the age structure, especially as measured by dependency ratios². The third section is an examination of the growth and industrial distribution of projected state level employment.

Where appropriate, the state population and employment projections are presented relative to the recent history of the state and also relative to the national data. The fourth section of this overview is a brief summary of the distribution of population and employment projections within the state. Both rates and amounts of change of total population and total employment are reviewed at a county level. In the last section of this summary report some of the methods and assumptions that are built into the UPED model will be discussed. These include the general assumptions that are part of the general UPED model, along with specific assumptions that pertain to this round of projections.

¹ The detailed report, this highlight report, and other economic and demographic publications are available on the Governor's Office of Planning and Budget website at: <http://www.governor.state.ut.us/dea>.

² Natural increase, net migration, and dependency ratios are defined in the sections in which they are discussed.

II. State Level Population Projections

Utah's population, which was 1.73 million in 1990, reached 2.25 million in 2000, and is projected to achieve 2.79 million in 2010, 3.37 million in 2020, and 3.77 million in 2030. Although the projected average annual growth rate decelerates from 2.4% per year in the 1990s to 1.1% per year in the 2020s, these growth rates are over double those projected for the nation as a whole.

Table 1: State of Utah Economic and Demographic Summary: 2000-2030

Year	POPULATION		SCHOOL AGE POPULATION (AGES 5-17)		TOTAL EMPLOYMENT		NON-AG WAGE & SALARY EMPLOYMENT		HOUSEHOLDS		Average Size
	Total	AARC*	Total	AARC*	Total	AARC*	Total	AARC*	Total	AARC*	
2000	2,246,553	N/A	509,320	N/A	1,338,800	N/A	1,073,835	N/A	705,423	N/A	3.13
2001	2,295,967	2.2%	510,935	0.3%	1,353,298	1.1%	1,085,088	1.0%	724,652	2.7%	3.11
2002	2,321,052	1.1%	507,884	-0.6%	1,367,769	1.1%	1,095,579	1.0%	736,228	1.6%	3.10
2003	2,353,608	1.4%	507,979	0.0%	1,394,236	1.9%	1,117,960	2.0%	749,928	1.9%	3.08
2004	2,410,082	2.4%	515,357	1.5%	1,434,619	2.9%	1,154,160	3.2%	771,226	2.8%	3.07
2005	2,462,815	2.2%	524,159	1.7%	1,470,424	2.5%	1,184,245	2.6%	792,393	2.7%	3.06
2006	2,517,980	2.2%	536,353	2.3%	1,507,277	2.5%	1,215,173	2.6%	815,374	2.9%	3.04
2007	2,577,495	2.4%	550,325	2.6%	1,545,590	2.5%	1,247,220	2.6%	837,679	2.7%	3.03
2008	2,639,344	2.4%	565,002	2.7%	1,584,593	2.5%	1,279,787	2.6%	861,084	2.8%	3.02
2009	2,711,614	2.7%	581,836	3.0%	1,626,454	2.6%	1,314,561	2.7%	887,270	3.0%	3.01
2010	2,785,040	2.7%	600,403	3.2%	1,667,931	2.6%	1,348,939	2.6%	913,828	3.0%	3.00
2011	2,853,699	2.5%	619,033	3.1%	1,707,088	2.3%	1,381,427	2.4%	938,541	2.7%	2.99
2012	2,925,270	2.5%	639,378	3.3%	1,746,473	2.3%	1,414,071	2.4%	964,584	2.8%	2.98
2013	2,994,248	2.4%	658,603	3.0%	1,784,116	2.2%	1,445,242	2.2%	989,868	2.6%	2.98
2014	3,060,727	2.2%	677,439	2.9%	1,820,234	2.0%	1,475,164	2.1%	1,014,686	2.5%	2.97
2015	3,123,021	2.0%	695,181	2.6%	1,854,207	1.9%	1,503,315	1.9%	1,038,890	2.4%	2.96
2016	3,179,973	1.8%	711,836	2.4%	1,885,596	1.7%	1,529,371	1.7%	1,062,411	2.3%	2.95
2017	3,233,031	1.7%	725,959	2.0%	1,914,966	1.6%	1,553,733	1.6%	1,084,121	2.0%	2.93
2018	3,281,961	1.5%	738,290	1.7%	1,942,449	1.4%	1,576,519	1.5%	1,104,742	1.9%	2.92
2019	3,325,539	1.3%	746,898	1.2%	1,967,473	1.3%	1,597,220	1.3%	1,123,301	1.7%	2.91
2020	3,366,724	1.2%	753,574	0.9%	1,991,307	1.2%	1,616,914	1.2%	1,141,485	1.6%	2.90
2021	3,408,655	1.2%	759,474	0.8%	2,014,961	1.2%	1,636,391	1.2%	1,159,737	1.6%	2.89
2022	3,449,651	1.2%	764,176	0.6%	2,037,962	1.1%	1,655,286	1.2%	1,177,990	1.6%	2.88
2023	3,489,101	1.1%	767,443	0.4%	2,060,241	1.1%	1,673,501	1.1%	1,195,673	1.5%	2.87
2024	3,526,661	1.1%	769,488	0.3%	2,081,939	1.1%	1,691,177	1.1%	1,212,958	1.4%	2.86
2025	3,566,120	1.1%	771,262	0.2%	2,104,352	1.1%	1,709,301	1.1%	1,231,076	1.5%	2.85
2026	3,604,061	1.1%	772,286	0.1%	2,126,144	1.0%	1,726,801	1.0%	1,249,247	1.5%	2.84
2027	3,643,852	1.1%	773,459	0.2%	2,148,660	1.1%	1,744,784	1.0%	1,267,527	1.5%	2.83
2028	3,684,522	1.1%	774,783	0.2%	2,171,635	1.1%	1,763,050	1.0%	1,285,785	1.4%	2.82
2029	3,726,966	1.2%	776,707	0.2%	2,195,413	1.1%	1,781,895	1.1%	1,304,130	1.4%	2.81
2030	3,768,360	1.1%	778,921	0.3%	2,216,782	1.0%	1,798,291	0.9%	1,321,939	1.4%	2.80

*AARC- Average Annual Rate of Change

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

The last year of historical data is 2001 for employment and 2001 for population.

Total population is the population in households plus the population in group quarters. Average household size is population in households divided by the number of households.

Populations are dated July 1.

A. Natural Increase Accounts for the Largest Portion of Utah's Population Growth

Natural increase, which is the amount by which annual births exceed annual deaths, will fuel 81% of Utah's population growth over the next thirty years. The number of births per year is projected to average 51,300 in the 2000s, 58,800 in the 2010s, and 63,000 in the 2020s. This compares to projected annual average deaths of 13,700 in the 2000s, 16,700 in the 2010s, and 20,800 in the 2020s.

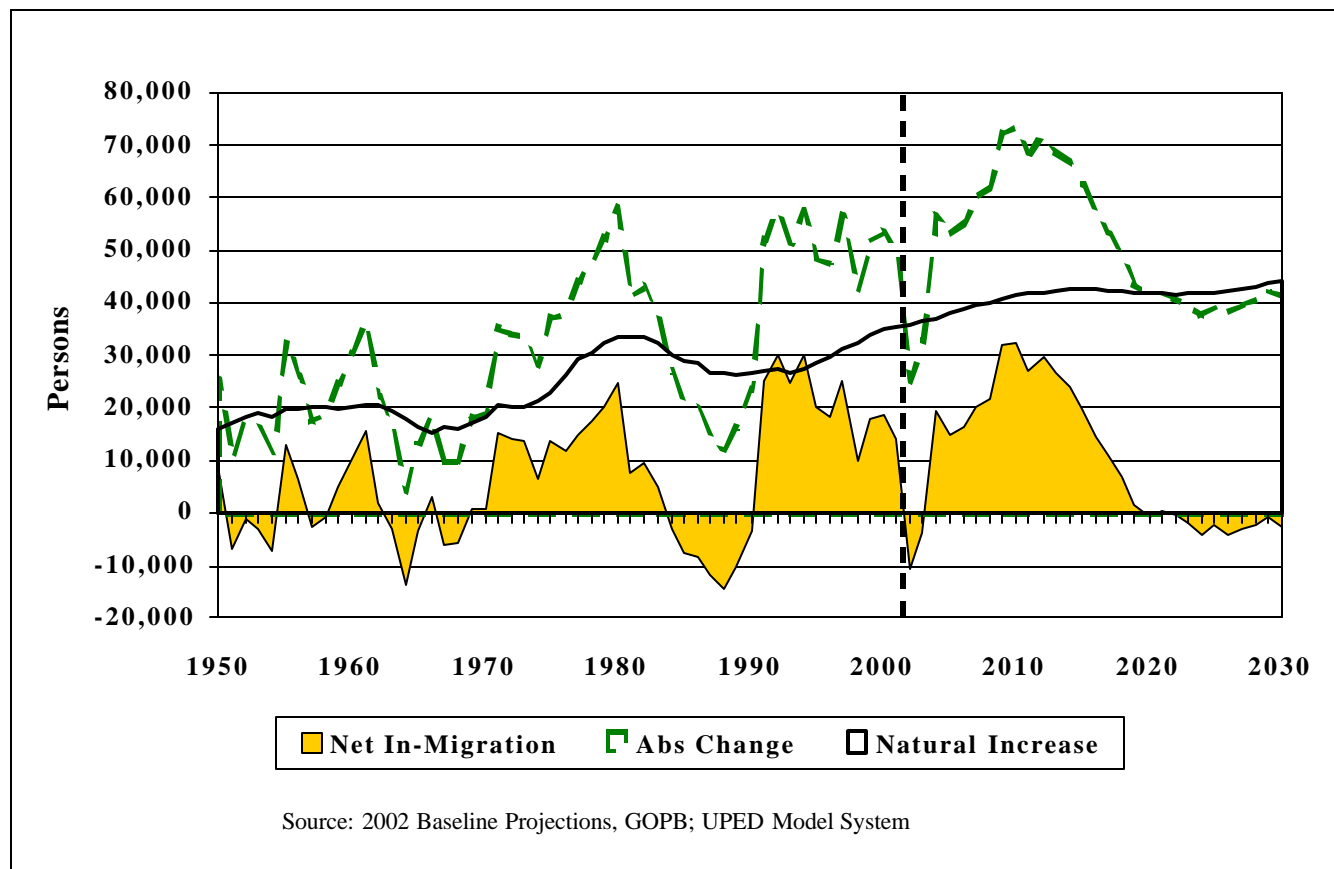
B. Net In-Migration Makes Up the Balance of the Population Growth

Net migration is gross in-migration less gross out-migration. Positive net in-migration occurs when more people move into the state than move out of the state for a given period of time. Net in-migration is projected to occur in the State of Utah over the next three decades. Approximately 293,500 of the 1.5 million population increase over the thirty-year projection period can be attributed to net in-migration, meaning in-migration accounts for about 19% of the projected increase.

C. The Rapid Rate of Natural Increase Occurs Primarily Because of Utah's Young Population and High Fertility Rates

A significant amount of attention has been given to the trends of the growing school-age population in Utah, where the grandchildren of the baby boomers are entering the school-age years (ages 5 to 17). The State of Utah is projecting an increase of 100,000 people in the school-age population over the next decade. It is important to note that this increase is not mainly fertility-driven or migration-driven, but rather the increase is largely due to the fact that such a large number of women are in their childbearing years. The Utah population is young relative to the nation and, in consequence, a greater portion of the female population is in childbearing years compared to the nation. Therefore, even if Utah's fertility rate (children per woman) was equal to that of the nation, more children would be born in Utah relative to the size of the population.

Figure 1: State of Utah Components of Population Change



However, in addition to the young population, Utah women have higher fertility rates, ranking Utah first among states nationwide. For the projection period, Utah's fertility rate is projected to remain fairly constant at 2.6 children per woman of childbearing age. The national projections have the fertility rate increasing from 2.1 during the next two decades to 2.2 during the last decade of the projection period. Further contributing to the rapid rate of natural increase is the fact that Utahns tend to have longer life expectancies (mortality rates at any given age are lower) compared to the nation.

Table 2: State of Utah Components of Population Change: 2001-2030

Year	Beginning Population	Births	Deaths	Natural Increase	Residual Migration	Ending Population	AARC
2001	2,246,553	47,688	12,437	35,251	14,164	2,295,967	2.20%
2002	2,295,967	49,362	13,468	35,894	(10,817)	2,321,052	1.09%
2003	2,321,052	49,908	13,491	36,417	(3,854)	2,353,608	1.40%
2004	2,353,608	50,606	13,597	37,009	19,464	2,410,082	2.40%
2005	2,410,082	51,857	13,812	38,045	14,688	2,462,815	2.19%
2006	2,462,815	52,865	14,019	38,846	16,316	2,517,980	2.24%
2007	2,517,980	53,722	14,266	39,456	20,051	2,577,495	2.36%
2008	2,577,495	54,599	14,536	40,063	21,789	2,639,344	2.40%
2009	2,639,344	55,423	14,807	40,616	31,654	2,711,614	2.74%
2010	2,711,614	56,381	15,139	41,242	32,184	2,785,040	2.71%
2011	2,785,040	57,238	15,497	41,741	26,917	2,853,699	2.47%
2012	2,853,699	57,861	15,816	42,045	29,526	2,925,270	2.51%
2013	2,925,270	58,535	16,154	42,381	26,595	2,994,248	2.36%
2014	2,994,248	59,063	16,481	42,582	23,901	3,060,727	2.22%
2015	3,060,727	59,464	16,841	42,623	19,667	3,123,021	2.04%
2016	3,123,021	59,744	17,193	42,551	14,388	3,179,973	1.82%
2017	3,179,973	59,904	17,534	42,370	10,693	3,233,031	1.67%
2018	3,233,031	60,032	17,863	42,169	6,758	3,281,961	1.51%
2019	3,281,961	60,158	18,196	41,962	1,610	3,325,539	1.33%
2020	3,325,539	60,248	18,522	41,726	(539)	3,366,724	1.24%
2021	3,366,724	60,401	18,918	41,483	441	3,408,655	1.25%
2022	3,408,655	60,748	19,314	41,434	(437)	3,449,651	1.20%
2023	3,449,651	61,245	19,732	41,513	(2,069)	3,489,101	1.14%
2024	3,489,101	61,869	20,173	41,696	(4,131)	3,526,661	1.08%
2025	3,526,661	62,531	20,633	41,898	(2,441)	3,566,120	1.12%
2026	3,566,120	63,365	21,128	42,237	(4,291)	3,604,061	1.06%
2027	3,604,061	64,234	21,633	42,601	(2,806)	3,643,852	1.10%
2028	3,643,852	65,223	22,180	43,043	(2,371)	3,684,522	1.12%
2029	3,684,522	66,264	22,809	43,455	(1,016)	3,726,966	1.15%
2030	3,726,966	67,376	23,449	43,927	(2,541)	3,768,360	1.11%

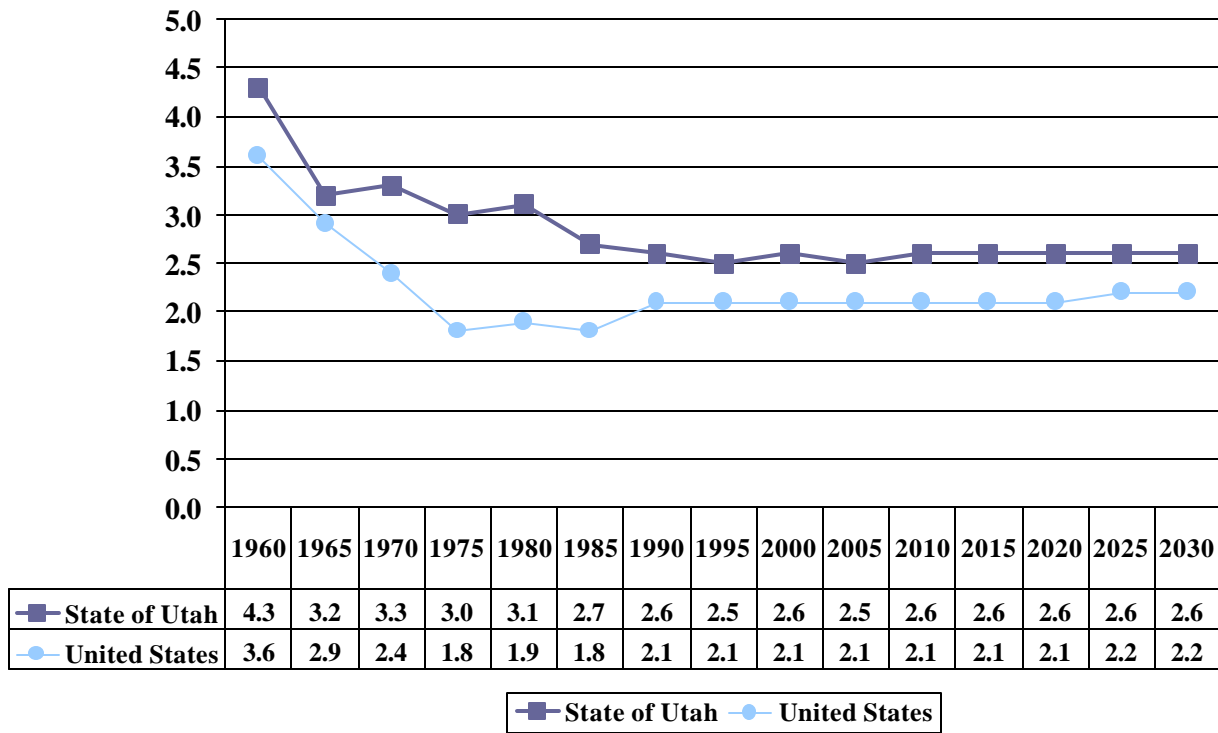
*AARC- Average Annual Rate of Change

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

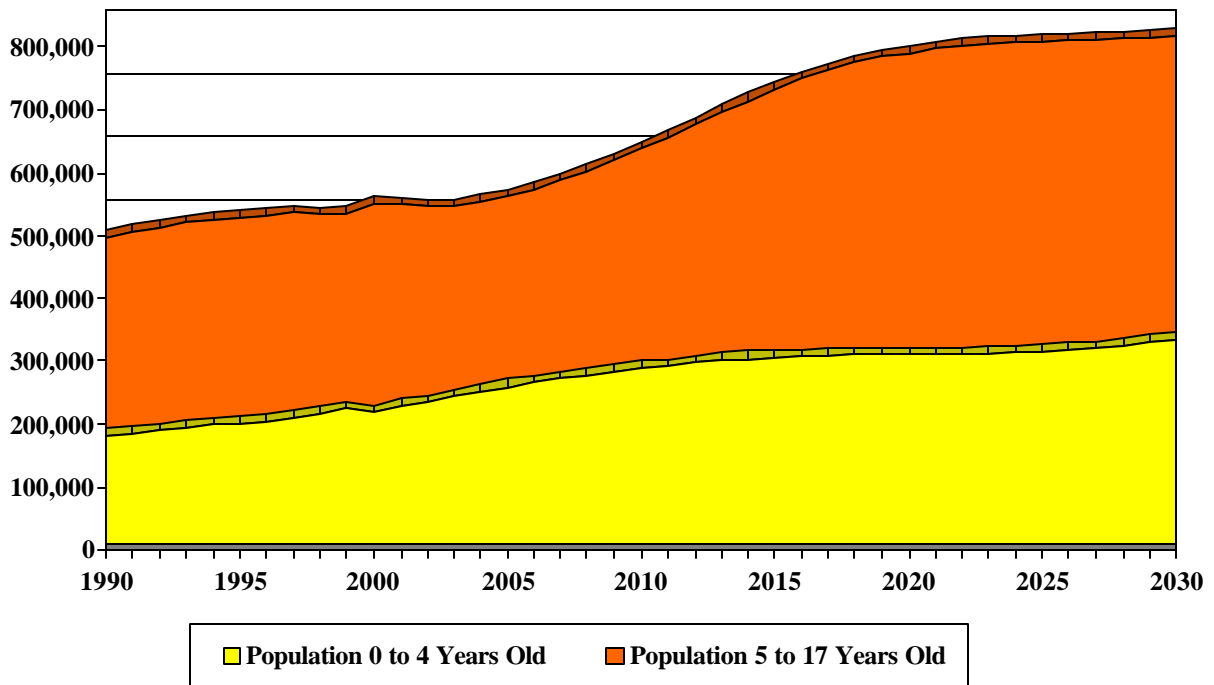
Populations are dated July 1.

Figure 2: Historical and Projected Total Fertility Rates for Utah and the U.S.



Source: 2002 Baseline Projections, GOPB; UPED Model System

Figure 3: Projections for Utah's School-Age Population



Source: 2002 Baseline Projections, GOPB; UPED Model System

Table 3: State of Utah Population Projections by Selected Age Groups: 1980-2030

Age	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008
0-4	189,962	172,252	209,378	219,482	226,498	234,404	243,085	251,117	257,271	262,874	268,354
5-17	350,143	456,783	509,320	510,935	507,884	507,979	515,357	524,159	536,353	550,325	565,002
18-29	351,391	337,882	405,905	512,261	515,703	520,449	531,069	536,025	539,490	542,463	544,443
30-39	184,866	261,192	299,285	306,789	307,505	309,651	317,187	327,082	340,023	355,000	371,787
40-64	275,455	345,459	529,059	552,127	567,424	582,683	601,540	618,773	633,130	652,090	668,253
65+	109,220	149,462	190,222	194,373	196,038	198,352	201,844	205,659	209,713	214,743	221,505
15-44	678,160	789,887	1,068,030	1,092,821	1,093,796	1,098,268	1,117,722	1,132,830	1,149,566	1,167,752	1,186,942
16-64	864,989	1,003,330	1,408,309	1,452,898	1,469,938	1,490,152	1,526,522	1,559,170	1,593,260	1,629,545	1,664,756
60+	155,480	201,994	252,677	259,135	263,080	269,046	277,087	284,096	290,698	302,076	314,608
Total	1,461,037	1,722,850	2,233,169	2,295,967	2,321,052	2,333,608	2,410,082	2,462,815	2,517,980	2,577,495	2,639,344
Median Age	24	26	27	27	27	28	28	28	28	28	29
Age	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
0-4	274,236	279,677	284,295	288,686	292,512	295,764	298,287	300,011	301,157	301,655	301,607
5-17	581,836	600,403	619,033	639,378	658,603	677,439	695,181	711,836	725,959	738,290	746,898
18-29	548,504	549,890	546,707	549,140	550,180	552,331	555,093	557,524	561,920	566,631	572,393
30-39	390,977	409,539	428,516	442,772	458,334	471,627	480,360	485,731	487,617	486,299	482,834
40-64	686,593	708,856	732,067	751,394	768,849	786,540	804,720	823,411	842,044	860,952	879,365
65+	229,468	236,675	243,081	253,900	263,770	277,026	289,390	301,460	314,334	328,134	342,242
15-44	1,212,019	1,238,942	1,264,463	1,292,190	1,318,463	1,344,531	1,366,278	1,386,188	1,403,636	1,423,757	1,439,490
16-64	1,706,337	1,748,539	1,788,779	1,827,267	1,863,483	1,898,814	1,931,762	1,962,012	1,991,336	2,018,198	2,041,547
60+	327,445	341,776	355,777	371,137	387,479	404,350	422,280	439,423	456,952	474,648	491,376
Total	2,711,614	2,785,040	2,853,689	2,925,270	2,994,248	3,060,727	3,123,021	3,179,973	3,233,031	3,281,961	3,325,539
Median Age	29	29	30	30	30	30	30	30	31	31	31
Age	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0-4	301,418	301,517	301,937	302,810	304,144	306,313	309,070	312,394	316,706	321,363	326,319
5-17	753,574	759,474	764,176	767,443	769,488	771,262	772,286	773,459	774,783	776,707	778,921
18-29	578,750	586,305	595,692	606,611	618,914	631,727	644,469	657,654	671,018	683,300	694,236
30-39	476,917	468,554	464,056	456,893	449,926	443,296	441,250	439,013	437,626	438,159	439,335
40-64	898,601	920,597	936,405	952,683	967,119	978,899	989,761	999,771	1,009,530	1,020,229	1,030,977
65+	357,464	372,208	387,385	402,661	417,070	432,623	447,225	461,361	474,859	487,208	498,572
15-44	1,452,285	1,464,808	1,475,776	1,484,301	1,490,702	1,496,331	1,498,696	1,506,938	1,514,283	1,524,142	1,534,465
16-64	2,062,781	2,083,878	2,108,404	2,129,889	2,150,791	2,171,797	2,192,210	2,213,922	2,236,161	2,260,076	2,283,198
60+	509,274	526,563	543,386	559,531	574,443	588,752	601,335	613,867	626,352	639,088	653,892
Total	3,366,724	3,408,655	3,449,651	3,489,101	3,526,661	3,566,120	3,604,061	3,643,852	3,684,522	3,726,966	3,768,360
Median Age	31	31	31	32	32	32	32	32	32	32	32

Note: 1980, 1990 and 2000 populations are April 1 U.S. Census populations, all others are July 1 populations.
Source: Governor's Office of Planning and Budget—Demographic and Economic Analysis Section, UPED Model System.
This is the 2002 Baseline, revised December, 2001.

D. Sustained In-Migration to the State Occurs Because of the Economy's Job Creation

Approximately 293,500 of the 1.5 million population increase over the thirty-year projection period can be attributed to net in-migration, meaning in-migration accounts for about 19% of the projected increase. Net in-migration occurs when 1) there is enough job creation to accommodate residents who are new entrants to the labor force, and 2) there is additional job creation such that in-migration is necessary to satisfy labor demand within the state. The sustained net in-migration is projected because job creation is also projected to be relatively rapid over the next three decades.

E. Utah's Age Structure Shifts Upward, but Remains Younger than the Nation

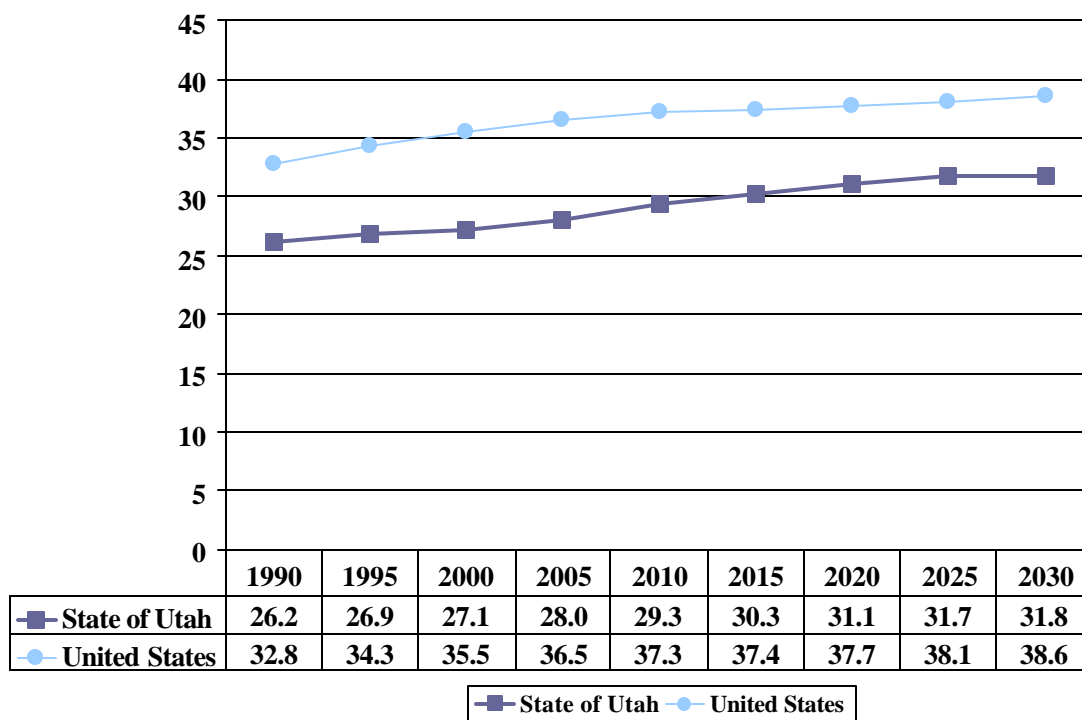
The median age is the age that divides the age distribution of a given population into two equal groups, one that is younger than the median and one that is older than the median. Utah's median age is projected to increase from 27 years in 2000 to 32 years by the year 2030. Over the same period, the U.S. median age is projected to increase from 36 to 39. The increasing median ages in both cases are largely the result of the aging of the baby boomers over time. The difference in median ages reflects the cumulative effect of Utah's higher fertility rate and the interaction of this high fertility rate with the younger population profile of the state. As Utah women in child-bearing years continue to have more children on average than women nationally, the younger age groups continue to be relatively larger as a portion of the population than is the case for the U.S. as a whole.

F. Utah's Dependency Ratio

One summary measure of a population's age structure is the dependency ratio. This ratio is defined as the number of non-working age persons (younger than 18, and 65 years and over) per 100 working age persons (ages 18 through 64). Utah's dependency ratio has historically been significantly higher than that of the nation. This has occurred because the pre-school and school-age portions of Utah's population have been substantial relative to its total population. In 1970, Utah's dependency ratio was 90 while the nation's was 79. In 2000, the dependency ratio for the state fell to 69 while the nation's fell to 63. This decline occurred, in both cases, primarily because the baby boomers reached working age.

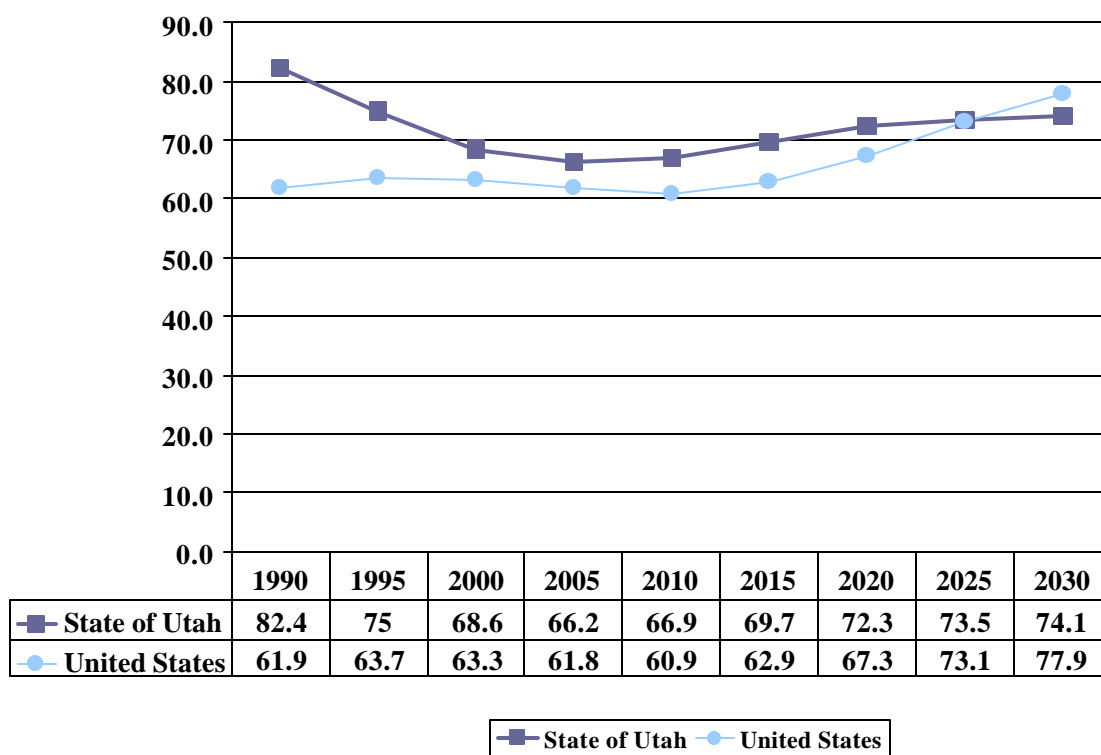
Utah's age structure is projected to continue to be characterized by a relatively high dependency ratio. However, the state's dependency ratio is projected to drop below that of the nation, beginning in 2025, and continuing throughout the remainder of the projections period. However, this anomaly is not expected to last more than a few years. The projected dependency ratio for Utah in 2030 is 74, while that of the nation is 78. The trend of converging, then crossing dependency ratios is primarily because the working age proportion of Utah's population is projected to increase while that of the nation is projected to decline. The aging of the baby boomers affects the age structure of both Utah and the U.S. However, the aging and retirement of the baby boomers will have a larger effect on the national dependency ratio because the younger age groups in Utah's population will increase more rapidly than those of the nation throughout the entire period.

Figure 4: Historical and Projected Median Ages for Utah and the U.S.



Source: 2002 Baseline Projections, GOPB; UPED Model System

Figure 5: Historical and Projected Dependency Ratios for Utah and the U.S.



Source: 2002 Baseline Projections, GOPB; UPED Model System

Table 4: State of Utah Population by Selected Age Groups as a Percent of Total: 1980-2030

Age	1980	1990	2000	2005	2010	2015	2020	2030
0-4	13.0%	10.0%	9.4%	10.2%	10.0%	9.6%	9.0%	8.7%
5-17	24.0%	26.5%	22.8%	21.3%	21.6%	22.3%	22.4%	20.7%
18-29	24.1%	19.6%	22.2%	21.8%	19.7%	17.8%	17.2%	18.4%
30-39	12.7%	15.2%	13.4%	13.3%	14.7%	15.4%	14.2%	11.7%
40-64	18.9%	20.1%	23.7%	25.1%	25.5%	25.8%	26.7%	27.4%
65+	7.5%	8.7%	8.5%	8.4%	8.5%	9.3%	10.6%	13.2%
15-44	46.4%	45.8%	47.8%	46.0%	44.5%	43.7%	43.1%	40.7%
16 - 64	59.2%	58.2%	63.1%	63.3%	62.8%	61.9%	61.3%	60.6%
60+	10.6%	11.7%	11.3%	11.5%	12.3%	13.5%	15.1%	17.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: 1980, 1990 and 2000 populations are April 1 U.S. Census populations; all others are July 1 populations.

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

Table 5: State of Utah Dependency Ratios: 1980-2030

1980 - 2030	1980	1990	2000	2005	2010	2015	2020	2030
Dependency Ratio	80	82	69	66	67	70	72	74
Pop 0-4 per 100 Pop age 18-64	23	18	16	17	17	16	15	15
Pop 5-17 per 100 Pop age 18-64	43	48	38	35	36	38	39	36
Pop 65+ per 100 Pop age 18-64	13	16	14	14	14	16	18	23

Note: The dependency ratio is defined as the population ages 0-17 and 65 plus per 100 persons ages 18-64.

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System

This is the 2002 Baseline, revised December, 2001.

III. State Level Employment Projections

Utah's non-farm payroll employment is projected to increase from 1,074,900 in 2000 to 1,798,000 in 2030. This is an increase of 723,100 jobs over the projections period. The State of Utah's average annual growth rate for the projections period is 1.7%, while the corresponding growth rates for the U.S. are projected to be about half that of Utah. In recent history, western states have experienced very strong employment growth. Utah is currently among the top job growth states in the nation. However, the reasons for Utah's strong economic performance go beyond the effects of the short-run cycle. Because of the structural adjustments and competitive imperatives that characterize the dynamics of the global economy, Utah is expected to continue to benefit from the comparative advantages it currently experiences well into the 21st century. Among the characteristics that bode well for Utah's long-term competitive advantage are its pro-business regulatory environment; moderate business taxes; a balanced, comprehensive tax system; a solid utility, communications, education and transportation infrastructure; a youthful and educated labor force; good universities; healthy lifestyles; inexpensive health insurance and worker's compensation; and a strong work ethic. The pace of job creation has slowed down from the boom conditions in the state in the 1990s, however Utah's economy is expected to continue to expand more rapidly than that of the nation throughout the projections period.

A. Employment Growth in Utah is Projected for Nearly Every Major Industry

Employment growth is projected for every major industry³ except agriculture and mining in Utah over the next three decades. Further, average annual growth in every industry except mining is projected to be higher than for those same industries at the national level. National projections indicate that two of the ten major industries will experience net declines in employment levels. The two industries are mining, and agriculture.

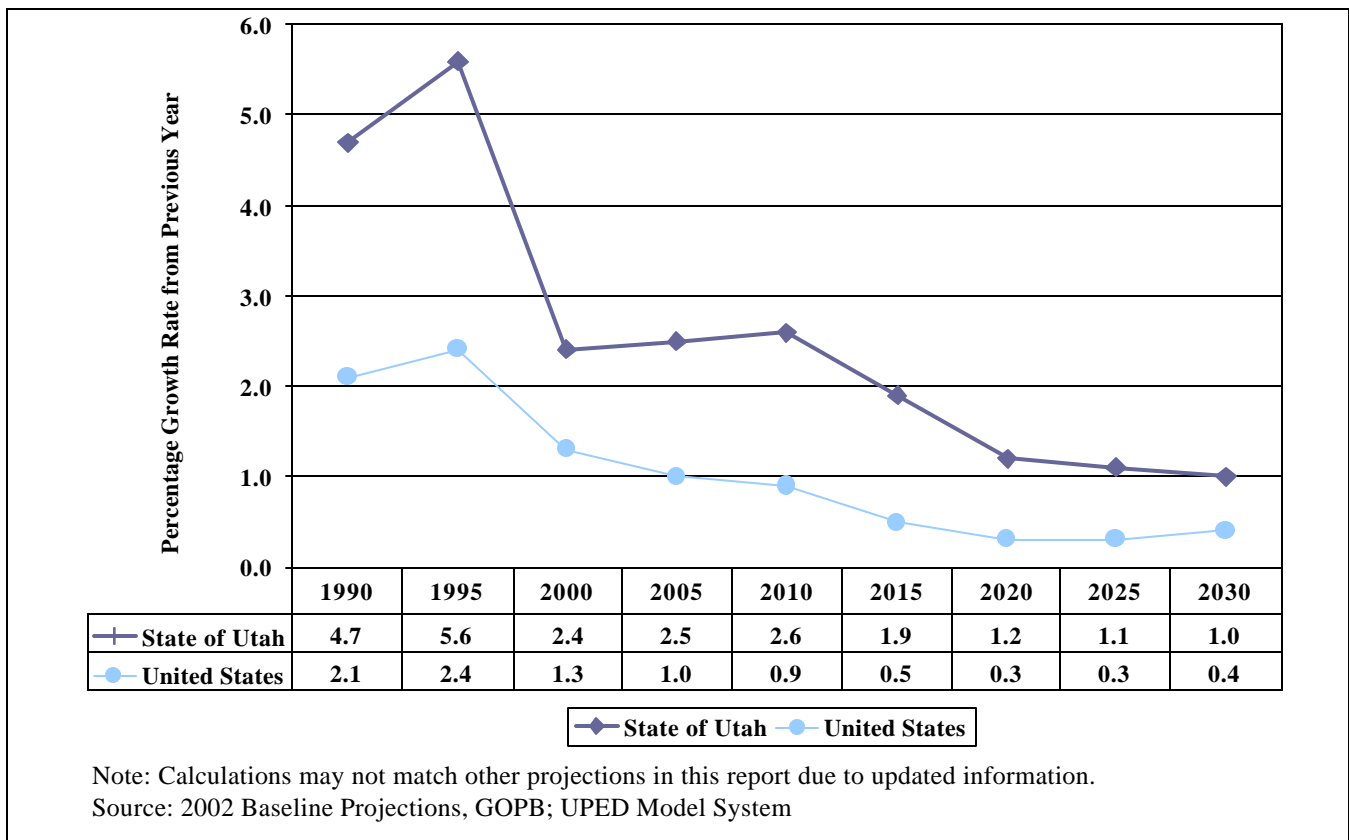
Of the ten major industries, construction is projected to have the highest average annual growth rate in the State of Utah over the next three decades. The projected average annual rate of change for 1990 through 2030 for Utah's construction sector is 3.4%. Other major industries in Utah projected to have strong employment growth (in excess of 2.0% per year on average) for the 1990 to 2030 period are services, FIRE, non-farm proprietors, trade, and TCPU. The slow growth industries in Utah are projected to be manufacturing and government.

B. Services, Non-farm Proprietors, and Trade are the Largest Industries in Utah

Services, non-farm proprietors, and trade are currently the three largest industries (in terms of employment) in Utah. The number of service jobs in Utah is expected to more than double, increasing from 314,100 in 2000 to 642,700 in 2030, an increase of 328,600 jobs. The number of non-farm proprietor jobs and new trade sector jobs are projected to increase significantly over the projections period as well. These three industries combined are projected to create 71% of the employment growth in the State of Utah over the next three decades.

³ There are ten major industries in this classification scheme. TCPU is transportation, communications, and public utilities. FIRE is finance, insurance, and real estate. Non-farm proprietors are non-farm sole proprietorships (i.e., an unincorporated business owned by a single individual) and partnerships (i.e., an unincorporated business association of two or more partners) and tax-exempt cooperatives (i.e., an unincorporated nonprofit business organization owned collectively by its members). The remaining industries are: agriculture, mining, construction, manufacturing, trade, services, and government.

Figure 6: Projected Non-Agricultural Payroll Employment



C. Diversification and a Shift in Industrial Composition

The State of Utah is becoming more economically diverse, and hence more like the economic structure of the United States, as measured by the Hachman Index. There are specific counties that are very different from the U.S., and this is not necessarily bad. For example, if the mining industry moved out of Carbon County, the economic structure of Carbon County would score higher on the Hachman Index, meaning it would now be more representative of the economic base of the nation, however the economy of Carbon County would not be better off.

Although the direction of shifts in composition of employment by industry are projected to be similar for Utah and the U.S., the 2000 and projected 2030 distributions of employment by industry will be different for Utah and the U.S. In 2001 the most significant differences between the industrial composition of Utah and the U.S. were the large concentration of employment in the mining sector, along with somewhat large concentrations in the construction and non-farm proprietors sectors. The concentration of employment in the TCPU and government sectors was slightly more concentrated in Utah when compared to the nation. The trade sector had composition exactly the same as the nation in 2001, and a somewhat smaller proportion in the other four major industries than the nation (i.e., FIRE, services, manufacturing, and agriculture).

The most significant differences between the employment shares for the projected industrial composition in 2030 of Utah and the U.S. are the relatively larger concentrations of Utah's employment in the construction and non-farm proprietors sectors, and the relatively smaller share of Utah's employment in agriculture and manufacturing. Utah is also projected to have a slightly larger share of employment in government and TCPU, and a slightly smaller share of employment in services, mining, trade, and FIRE when compared to the nation. This is the combined result of the differential shifts in industrial composition between Utah and the U.S. in the projections period, and the initial differences in the composition of employment between the two.

⁴ This is an index of similarity that measures how closely the employment distribution of the subject region resembles that of the reference region. The value of the index is between zero and one. As the value of the index approaches one, this means that the subject region's employment distribution among industries is more similar to that of the reference region. If the reference region is the nation, and, given the assumption that the nation's economy is diversified, a larger value of the Hachman Index relative to the nation means that a subject region is more diversified. In 1977 the Hachman Index for the State of Utah was .93. It is .98 in 2000, and is projected to rise to .99 by 2030.

Table 6: Utah Employment Projections by Major Industry: 1980-2030

Industry	1980	1990	1995	2000	2005
Agriculture (4)	19,660	19,148	18,468	20,595	19,402
Mining	18,502	8,604	8,114	8,003	7,735
Construction	31,548	27,927	54,793	71,597	67,102
Manufacturing	87,707	107,102	123,865	130,847	129,497
TCPU (1)	34,127	42,286	51,496	60,846	63,796
Trade	128,692	172,394	220,026	251,635	268,336
FIRE (2)	25,768	34,133	47,678	57,327	65,404
Services (3)	105,839	185,865	243,716	314,060	377,281
Government	124,929	150,557	163,669	184,539	209,903
Non-farm Proprietors (4)	90,616	152,403	184,868	239,351	261,968
TOTAL EMPLOYMENT (5)	667,388	900,419	1,116,693	1,338,800	1,470,424
Non-Ag Payroll Emp (6)	551,833	724,013	907,909	1,073,835	1,184,245
Industry	2010	2015	2020	2025	2030
Agriculture (4)	18,900	18,227	17,471	16,516	16,165
Mining	7,573	7,302	6,928	6,529	4,732
Construction	77,735	86,315	93,497	99,945	106,302
Manufacturing	138,736	148,022	156,635	165,059	173,365
TCPU (1)	69,795	75,928	81,563	87,186	93,191
Trade	299,073	328,566	350,655	370,282	392,403
FIRE (2)	73,264	80,670	85,892	90,235	94,725
Services (3)	451,513	519,062	568,016	607,523	642,662
Government	236,205	262,529	278,774	287,448	295,861
Non-farm Proprietors (4)	295,137	327,586	351,876	373,629	397,376
TOTAL EMPLOYMENT (5)	1,667,931	1,854,207	1,991,307	2,104,352	2,216,782
Non-Ag Payroll Emp (6)	1,348,939	1,503,315	1,616,914	1,709,301	1,798,291

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

Calculations may not match other projections in this report due to updated information.

- (1) Transportation, Communications and Public Utilities
- (2) Finance, Insurance and Real Estate
- (3) Includes Private Household and Agricultural Services employment (SICs 88, 07, 08, and 09)
- (4) U.S. Bureau of Economic Analysis definition
- (5) Totals may not add due to rounding
- (6) Excludes Agriculture, Private Household, and Non-Farm Proprietor employment

Table 7: State of Utah Employment Projections and Percent of Total by Major Industry: 1980-2030

Year/Industry	Agriculture	Mining	Construction	Manufacturing	TCPU [1]	Trade	FIRE [2]	Services [3]	Government	Non-Farm Proprietors	Total Employment	Non-Farm Payroll Employment
1980												
Number of Jobs	19,660	18,302	31,548	87,707	34,127	128,692	25,768	105,839	124,929	90,616	667,388	551,833
Percent of Total	2.9%	2.7%	4.7%	13.14%	5.11%	19.28%	3.86%	15.86%	18.72%	13.38%	100.00%	82.69%
1990												
Number of Jobs	19,148	8,604	27,927	107,102	42,286	172,394	34,133	185,865	150,557	152,403	900,419	724,013
Percent of Total	2.1%	0.96%	3.10%	11.89%	4.70%	19.15%	3.79%	20.64%	16.72%	16.93%	100.00%	80.41%
2000												
Number of Jobs	20,395	8,003	71,997	130,847	60,846	251,635	57,327	314,060	184,539	239,351	1,338,800	1,073,835
Percent of Total	1.54%	0.60%	5.3%	9.77%	4.54%	18.80%	4.28%	23.46%	13.78%	17.88%	100.00%	80.21%
2010												
Number of Jobs	18,900	7,573	77,735	138,736	69,795	299,073	73,264	451,513	236,205	295,137	1,667,931	1,348,939
Percent of Total	1.1%	0.4%	4.66%	8.32%	4.18%	17.93%	4.39%	27.07%	14.16%	17.69%	100.00%	80.87%
2020												
Number of Jobs	17,471	6,928	93,497	156,635	81,563	350,655	85,892	568,016	278,774	351,876	1,991,307	1,616,914
Percent of Total	0.88%	0.3%	4.70%	7.87%	4.10%	17.61%	4.31%	28.52%	14.00%	17.67%	100.00%	81.20%
2030												
Number of Jobs	16,165	4,732	106,302	173,365	93,191	392,403	94,725	642,662	295,861	397,376	2,216,782	1,798,291
Percent of Total	0.73%	0.21%	4.80%	7.82%	4.20%	17.70%	4.27%	28.99%	13.35%	17.93%	100.00%	81.12%
Average Annual Growth												
2000-2030	-0.80%	-1.74%	1.33%	0.94%	1.43%	1.49%	1.69%	2.42%	1.59%	1.70%	1.70%	1.73%

Sources: Utah Department of Workforce Services; 2002 Baseline Projections, Governor's Office of Planning and Budget, Uped Model System.

This is the 2002 Baseline, revised December, 2001.

[1] Transportation, Communication, and Public Utilities;

[2] Finance, Insurance and Real Estate;

[3] Includes Private Household and Agricultural Services employment.

Table 8: Differences Between the Employment Distributions of Utah and the U.S.

Industry	2000	2030
Agriculture	-0.4%	-0.6%
Mining	0.3%	0.0%
Construction	1.2%	0.8%
Manufacturing	-1.4%	-1.2%
TCPU	0.4%	0.1%
Trade	0.1%	-0.8%
FIRE	-0.4%	-0.3%
Services	-2.6%	-0.6%
Government	0.3%	0.6%
Non-Farm Proprietors	2.6%	2.0%

* This is computed by taking the difference between the Utah share of employment in a given industry and that of the nation. This is done for 2000 and for 2030. This shows, for example, that Utah has a larger share of employment in mining in 2000 and a smaller share in 2030 compared to the nation.

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

Table 9: Location Quotients and Hachman Index for the State of Utah

Industry	1980	1990	2000	2010	2020	2030
Agriculture	0.89	0.94	0.81	0.69	0.60	0.55
Mining	3.05	1.86	1.86	1.69	1.45	0.97
Construction	1.20	0.81	1.30	1.15	1.17	1.20
Manufacturing	0.73	0.86	0.87	0.83	0.83	0.87
TCPU	1.13	1.13	1.08	1.01	1.00	1.04
Trade	1.06	1.01	1.01	0.96	0.95	0.96
FIRE	0.82	0.77	0.91	0.94	0.93	0.92
Services	0.88	0.93	0.90	0.97	0.99	0.98
Government	1.14	1.10	1.02	1.08	1.08	1.05
Non-Farm Proprietors	1.12	1.21	1.17	1.13	1.12	1.13
Hachman Index	0.94	0.98	0.98	0.99	0.99	0.99

*Location Quotients are measures of relative shares. The share of a given industry in the subject area (Utah) is compared to that of the reference region (United States). A location greater than 1 indicates specialization in a subject region relative to the reference region.

**The Hachman Index measures how closely the employment distribution of the subject region (Utah) resembles that of the reference region (United States). As the value of the index approaches one, this means that the subject region's employment distribution among industries is more similar to that of the reference region.

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

Table 10: Hachman Index by Individual County in the State of Utah

County	1980	1990	2000	2010	2020	2030
Beaver	0.48	0.46	0.36	0.42	0.48	0.52
Box Elder	0.69	0.53	0.57	0.61	0.61	0.58
Cache	0.84	0.81	0.85	0.85	0.84	0.82
Carbon	0.15	0.20	0.37	0.42	0.55	0.71
Daggett	0.35	0.49	0.60	0.60	0.61	0.63
Davis	0.73	0.83	0.89	0.91	0.92	0.92
Duchesne	0.21	0.33	0.29	0.43	0.54	0.61
Emery	0.06	0.10	0.10	0.12	0.17	0.27
Garfield	0.40	0.55	0.58	0.66	0.71	0.75
Grand	0.22	0.60	0.81	0.83	0.84	0.84
Iron	0.81	0.84	0.91	0.90	0.90	0.91
Juab	0.65	0.56	0.67	0.72	0.76	0.76
Kane	0.70	0.75	0.87	0.88	0.89	0.89
Millard	0.31	0.40	0.36	0.42	0.44	0.44
Morgan	0.45	0.32	0.47	0.51	0.54	0.55
Piute	0.24	0.13	0.13	0.15	0.17	0.18
Rich	0.22	0.18	0.28	0.32	0.35	0.37
Salt Lake	0.93	0.96	0.95	0.96	0.96	0.96
San Juan	0.10	0.33	0.44	0.33	0.41	0.55
Sanpete	0.47	0.48	0.60	0.65	0.68	0.70
Sevier	0.60	0.62	0.65	0.68	0.73	0.77
Summit	0.41	0.80	0.79	0.81	0.82	0.82
Tooele	0.42	0.53	0.82	0.86	0.87	0.88
Uintah	0.21	0.25	0.19	0.30	0.43	0.51
Utah	0.94	0.92	0.93	0.93	0.93	0.93
Wasatch	0.59	0.68	0.73	0.78	0.79	0.79
Washington	0.81	0.88	0.84	0.88	0.88	0.88
Wayne	0.30	0.27	0.48	0.60	0.68	0.73
Weber	0.93	0.94	0.96	0.96	0.96	0.97

*The subject region is each individual county, and the reference region is the United States.

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

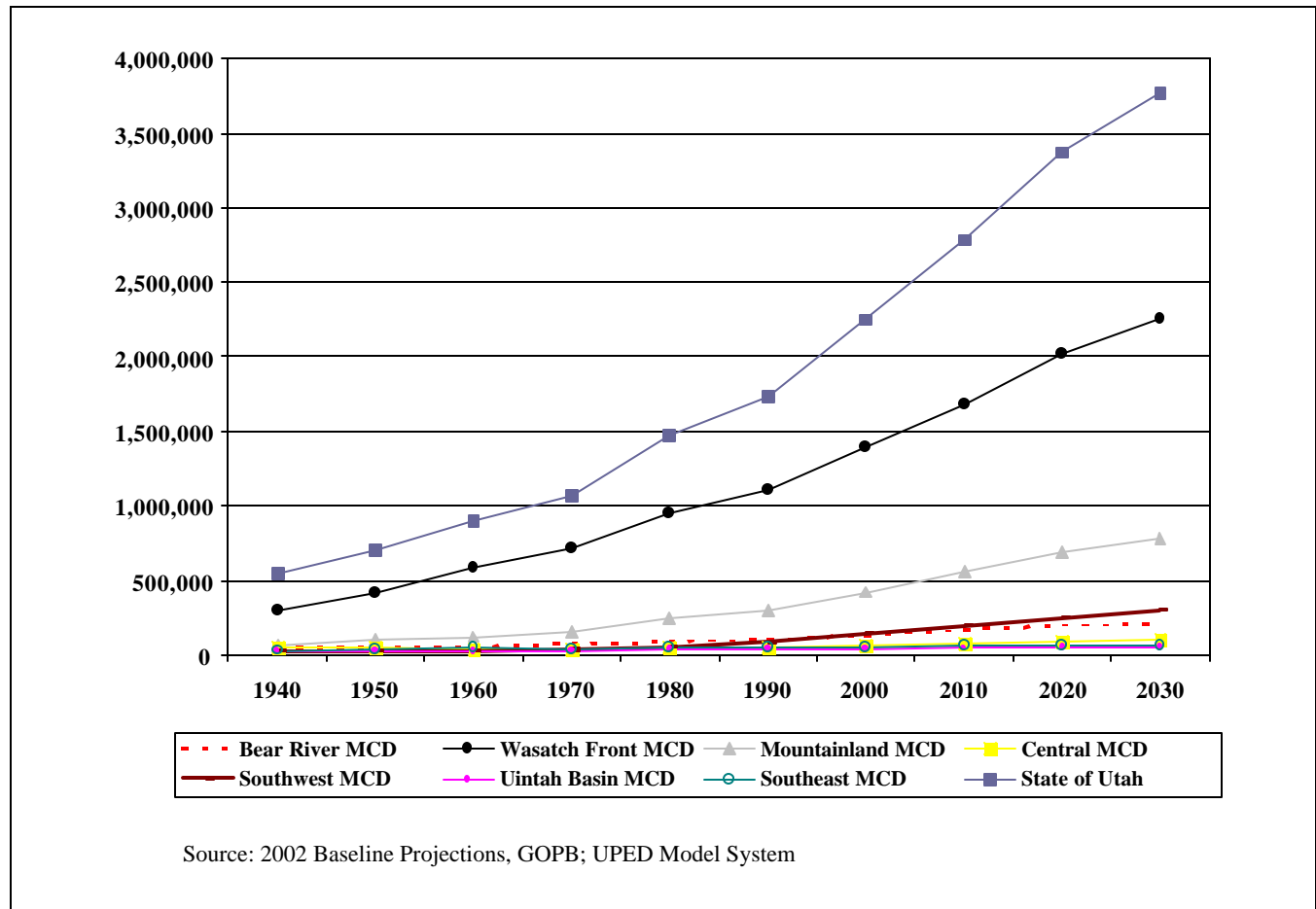
This is the 2002 Baseline, revised December, 2001.

IV. County Level Population and Employment Projections

A. In Absolute Numbers, Population Growth is Primarily Concentrated Along the Wasatch Front

About 1.1 million (or about 73%) of the projected 1.5 million population increase projected for the state between 2000 and 2030 will be concentrated in the counties of Salt Lake, Utah, Davis, and Weber. This is slightly less than the 76% share of the state's population in these counties in 2000. Therefore, the projected share of the state's population in these four counties in 2030 will decline slightly to 75%.

Figure 7: Population Estimates and Projections by County and Multi-County District: 1940-2030



B. Counties that are Expected to Account for a Large Portion of the State's Total Population Growth

Washington County is projected to account for 8.4% of the state's total population increase from 2000 to 2030. Its population is projected to increase from 91,104 in 2000 to 218,764 in 2030.

Tooele County is projected to account for 3.7% of the state's total population increase from 2000 to 2030. Its population is projected to increase from 41,549 in 2000 to 97,287 in 2030.

Cache County is projected to account for 3.4% of the state's total population increase from 2000 to 2030. Its population is projected to increase by 51,590, from 91,897 in 2000 to 143,487 in 2030.

Summit County is projected to account for 2.5% of the state's total population increase from 2000 to 2030. Its population is projected to increase by 38,599, from 30,048 in 2000 to 68,647 in 2030.

Table 11: State of Utah Population by County and Multi-County District: 1980-2030

MCD/County	1980	1990	2000	2005	2010	2015	2020	2030	AARC 2000-2030
BEAR RIVER	92,498	108,393	136,097	150,753	171,024	191,831	203,493	213,803	1.52%
Box Elder	33,222	36,485	42,745	46,913	53,188	59,368	63,305	67,987	1.56%
Cache	57,176	70,183	91,391	101,798	115,657	130,156	137,840	143,487	1.52%
Rich	2,100	1,725	1,961	2,042	2,179	2,307	2,348	2,329	0.57%
WASATCH FRONT	941,172	1,104,356	1,381,778	1,503,068	1,681,095	1,870,374	2,012,764	2,252,175	1.64%
Davis	146,540	187,941	238,994	263,041	293,134	324,926	348,314	387,476	1.62%
Morgan	4,917	5,528	7,129	7,529	8,355	9,276	10,005	11,333	1.56%
Salt Lake	619,066	725,956	898,387	970,361	1,080,990	1,198,962	1,287,049	1,434,704	1.57%
Tooele	26,033	26,601	40,735	50,277	59,980	70,554	79,764	97,287	2.94%
Weber	144,616	158,330	196,533	211,860	238,636	266,656	287,632	321,375	1.65%
MOUNTAINLAND	236,827	289,197	413,487	475,644	560,005	641,216	692,111	785,184	2.16%
Summit	10,198	15,518	29,736	35,274	42,131	49,618	56,164	68,647	2.83%
Utah	218,106	263,590	368,536	421,931	495,320	564,993	606,582	682,004	2.07%
Wasatch	8,523	10,089	15,215	18,439	22,554	26,605	29,365	34,533	2.77%
CENTRAL	47,087	52,294	66,192	71,484	77,227	84,354	90,312	94,777	1.20%
Juab	5,530	5,817	8,238	9,575	10,948	12,541	13,982	15,640	2.16%
Millard	8,970	11,333	12,405	13,048	13,533	14,241	14,717	14,589	0.54%
Piute	1,329	1,277	1,435	1,448	1,508	1,569	1,604	1,586	0.33%
Sanpete	14,620	16,259	22,763	24,483	26,341	28,667	30,586	31,828	1.12%
Sevier	14,727	15,431	18,842	20,113	21,642	23,556	25,140	26,150	1.10%
Wayne	1,911	2,177	2,509	2,817	3,255	3,780	4,283	4,984	2.31%
SOUTHWEST	55,489	83,263	140,919	164,427	193,114	224,412	251,344	303,167	2.59%
Beaver	4,378	4,765	6,005	6,431	6,931	7,468	7,820	8,412	1.13%
Garfield	3,673	3,980	4,735	4,868	5,331	5,831	6,192	6,836	1.23%
Iron	17,349	20,789	33,779	36,453	40,694	45,308	48,940	55,537	1.67%
Kane	4,024	5,169	6,046	6,906	8,271	9,762	11,071	13,618	2.74%
Washington	26,065	48,560	90,354	109,769	131,887	156,043	177,321	218,764	2.99%
UINTAH BASIN	33,840	35,546	40,516	42,877	44,855	48,060	50,199	51,374	0.79%
Daggett	769	690	921	976	1,030	1,112	1,169	1,208	0.91%
Duchesne	12,565	12,645	14,371	15,258	16,258	17,692	18,722	19,545	1.03%
Uintah	20,506	22,211	25,224	26,643	27,567	29,256	30,308	30,621	0.65%
SOUTHEAST	54,124	49,801	54,180	54,562	57,720	62,774	66,501	67,880	0.75%
Carbon	22,179	20,228	20,422	20,564	21,811	23,777	25,239	25,853	0.79%
Emery	11,451	10,332	10,860	10,667	11,107	11,910	12,458	12,440	0.45%
Grand	8,241	6,620	8,485	8,597	8,973	9,642	10,105	10,126	0.59%
San Juan	12,253	12,621	14,413	14,734	15,829	17,445	18,699	19,461	1.01%
STATE OF UTAH	1,461,037	1,722,850	2,233,169	2,462,815	2,785,040	3,123,021	3,366,724	3,768,360	1.76%

Notes: This is the 2002 Baseline, revised December, 2001.

AARC is average annual rate of change;

1980 and 1990 populations are April 1 U.S. Census modified age, race and sex (MARS) populations;

2000 populations are April 1 U.S. Census summary file 1 (SF1) populations; all others are July 1 populations.

Sources: U.S. Bureau of the Census; Utah Population Estimates Committee;

Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

C. Counties With Population Growth Rates in Excess of the State Population Growth Rate Will Gain in Their Share of the State's Population

The counties with the highest projected average annual rates of growth over the 1990 to 2030 period are Washington (3.0%), Tooele (2.9%), Summit (2.8%), Kane (2.8%), Wasatch (2.7%), Wayne (2.3%), Juab (2.1%), and Utah (2.0%). These growth rates are all in excess of the state's average annual rate of growth of 1.7% for the 1990 to 2030 period. Thus, these counties will gain in terms of their shares of the state's total population.

D. In Absolute Numbers, Employment Growth is Primarily Concentrated Along the Wasatch Front

Of the 724,500 net nonagricultural employment creation projected for the state from 2000 to 2030, 76%, or 552,100 jobs, are expected to be within Salt Lake, Utah, Davis, and Weber counties. Among this group, Utah and Weber counties are projected to have average annual growth rates of employment in excess of that of the state as a whole.

E. Counties With the Highest Rates of Projected Employment Growth

The counties with the most rapid rates of projected employment growth are also those counties with rapid rates of projected population growth. Rapid employment growth makes it possible for a region to support more people. Population growth reinforces economic expansion as well. The counties with the most rapid rates of projected employment growth from 1990 to 2030 are Washington (3.21%), Kane (3.16%), Wasatch (2.60%), Tooele (2.28%), Summit (2.28%) and Juab (2.23%).

V. Methods and Assumptions

A. Models

The 2002 long-term projections were produced using the UPED Model System. The UPED Model is a combination of a three-component cohort population model and an economic base employment model. It produces projections of population, components of population change (births, deaths and migration), households, labor force, and employment at the Multi-County District (MCD), or regional level. The UCAPE and CASA Models allocate the UPED population, components of population change and employment to counties. County or MCD values are aggregated to yield the projection for the State of Utah.

Figure 8: Utah Process Economic and Demographic Model (UPED)

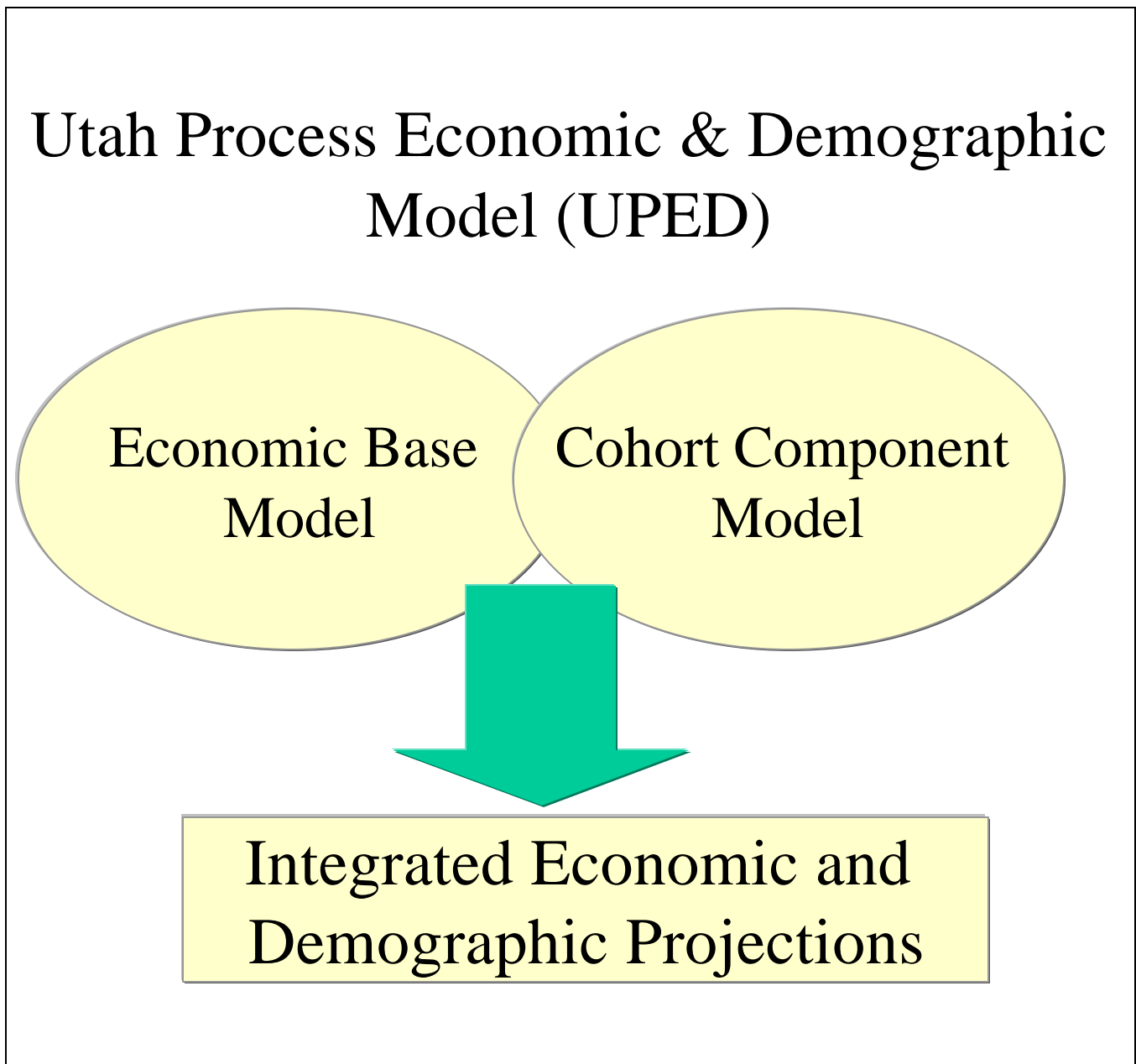
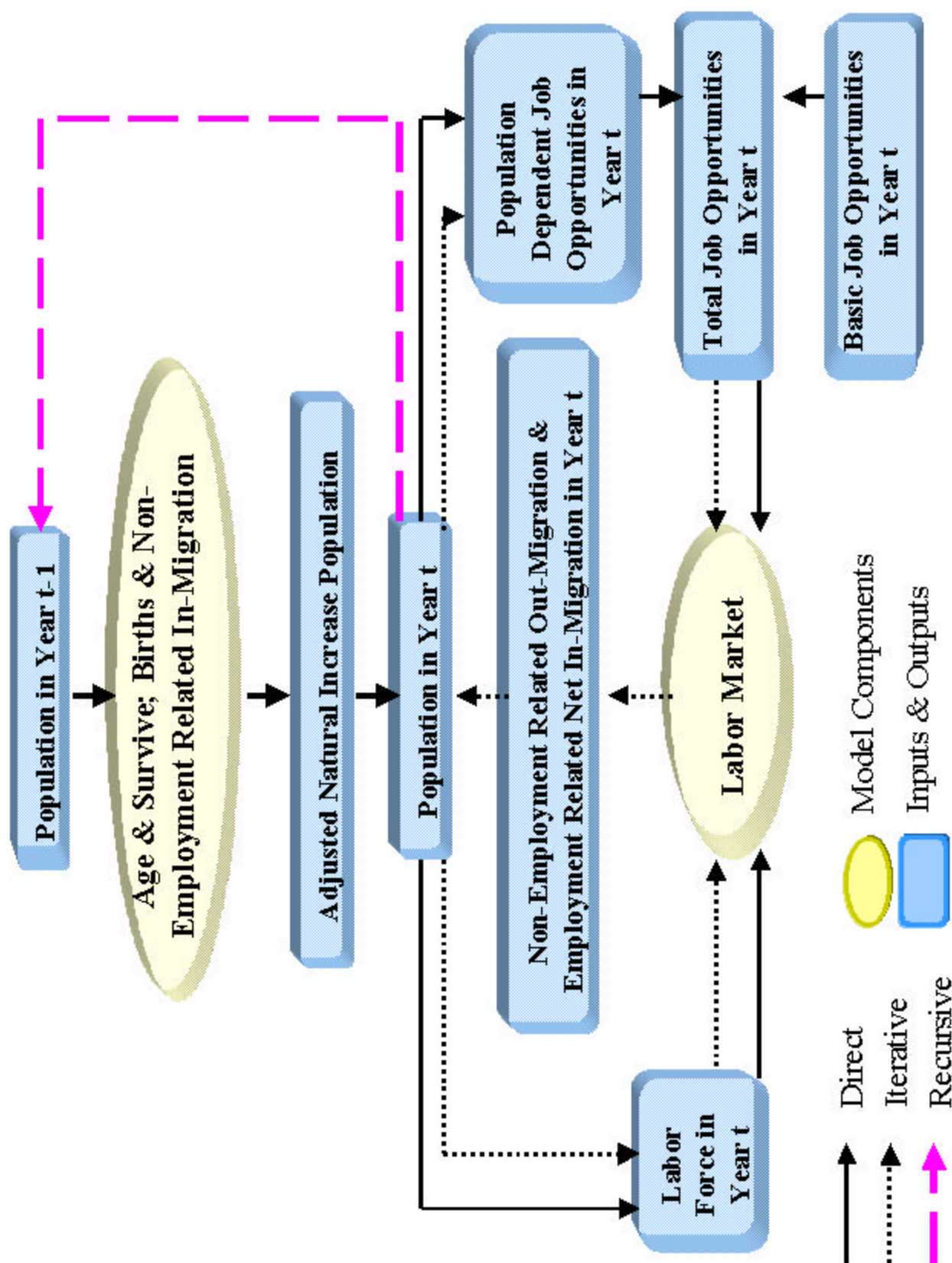


Figure 9: UPED Model General Flowchart



B. Fertility

MCD specific birth probabilities by age of mother are assumed to remain constant at their estimated 2001 level to 2030. County mean differences in total fertility rates, 1990-2001, within MCDs are preserved. The resulting total fertility rates (central birth rates) for MCDs are: 2.41 for Bear River, 2.47 for Wasatch Front, 2.90 for Mountainland, 2.80 for Central, 2.63 for Southwest, 2.73 for Uintah Basin, and 2.22 for Southeast, yielding 2.51 for the state.

C. Survival

State level survival rates by age and sex are assumed for all MCDs. Survival rates are assumed to increase along with projected U.S. survival rates to 2030. This assumption yields an increase in life expectancy of 4.1 years, from 74.9 years in 1990 to 79.0 years in 2030, for males. For females the similar increase is 3.1 years, from 80.4 in 1990 to 83.5 in 2030.

D. Labor Force Participation

MCD specific labor force participation rates are assumed to trend with projected U.S. rates to 2020, except where U.S. rates are projected to fall. In effect, this assumes little or no change in Utah male participation rates and increases in the middle and upper age female rates. After 2020, labor force participation rates are assumed to remain constant at their 2020 levels.

E. Unemployment Rates

Unemployment rates at the MCD level are assumed to rise in 2001 and 2002, then fall in 2003 such that the state level unemployment rates for these years are 4.4%, 5.0% and 4.8%, respectively. It is further assumed that MCD level unemployment rates continue to fall until 2008, giving an assumed state level unemployment rate of 3.9% from 2008 to 2030.

Figure 10: Historical and Projected Life Expectancies for Utah and the U.S.

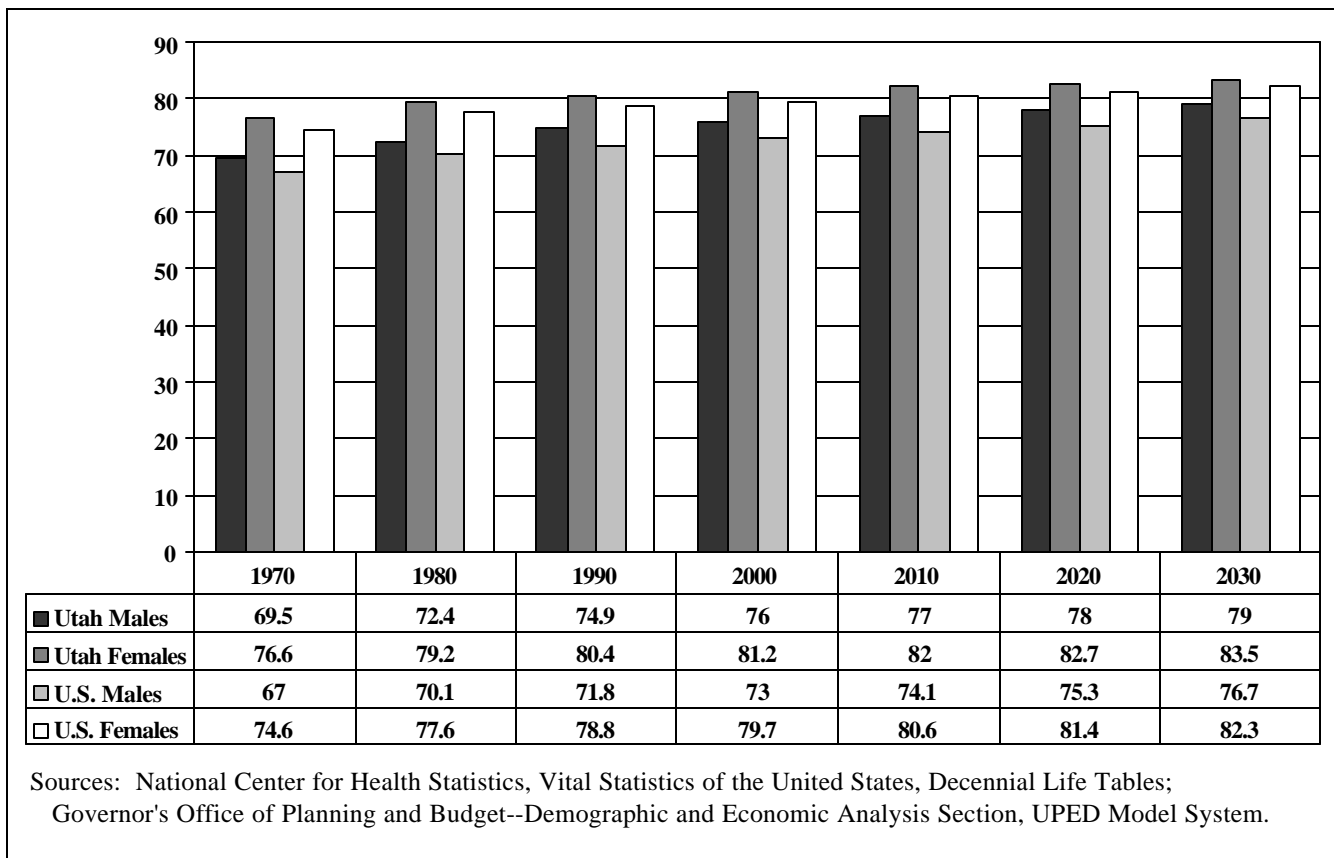


Table 12: Historical and Projected Life Expectancies for Utah and the U.S.

Year	Utah			U.S.		
	Male	Female	Total	Male	Female	Total
1970	69.5	76.6	73.0	67.0	74.6	70.8
1980	72.4	79.2	75.8	70.1	77.6	73.9
1990	74.9	80.4	77.7	71.8	78.8	75.3
2000	76.0	81.2	78.6	73.0	79.7	76.4
2010	77.0	82.0	79.5	74.1	80.6	77.3
2020	78.0	82.7	80.4	75.3	81.4	78.4
2030	79.0	83.5	81.3	76.7	82.3	79.5

Sources: National Center for Health Statistics, Vital Statistics of the United States, Decennial Life Tables; Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

This is the 2002 Baseline, revised December, 2001.

F. Multi-Job Holding Rates

MCD specific multi-job holding rates are assumed to revert to their 1990-2001 mean over the interval 2001 to 2006.

G. Employment Growth Assumptions

For the short term, 2001 to 2004, non-agricultural payroll employment growth by industry and MCD is constrained to GOPB's short-term forecast of employment by major industry at the state level. Rates of non-ag payroll employment growth for these years are 0.94%, 0.97%, 2.04%, and 3.24%, respectively.

For the long-term, 2000 to 2030, basic employment growth was based on a demographic assumption, but was consistent with a conservative mid-range growth assumption based upon alternative growth analysis. Growth in export employment is assumed sufficient to generate cumulative net in-migration equal to 19% of total population change and to generate cumulative natural increase (births minus deaths) equal to 81% of total population change over the interval 2000 to 2030. These percents correspond to those of the last three decades.

A total of 88 specific events consisting of announced or expected hirings and layoffs by individual firms or projects were included in this set of projections. In net, these yielded reductions in employment of 3,030 in 2001; 811 in 2002; 26 in 2003; and 11 in 2004. These were provided by GOPB and the regional associations of government.

The Department of Natural Resources provided employment forecasts by county for coal mining and oil and gas extraction which were included.

H. Specific Assumptions

Additional assumptions include:

- ▶ Davis County reaches build-out at 400,000 persons.
- ▶ Construction employment reverts to its historical share of total employment in 2009.
- ▶ Agricultural jobs trend with the U.S. Federal Defense employment and remain relatively constant after 2001.
- ▶ Geneva's closing is included.

I. Additional Information

For additional information on historical and projected economic and demographic data, including methods, procedures, and assumptions, visit the web site: www.qget.state.ut.us/projections.